# CFP2000 Result

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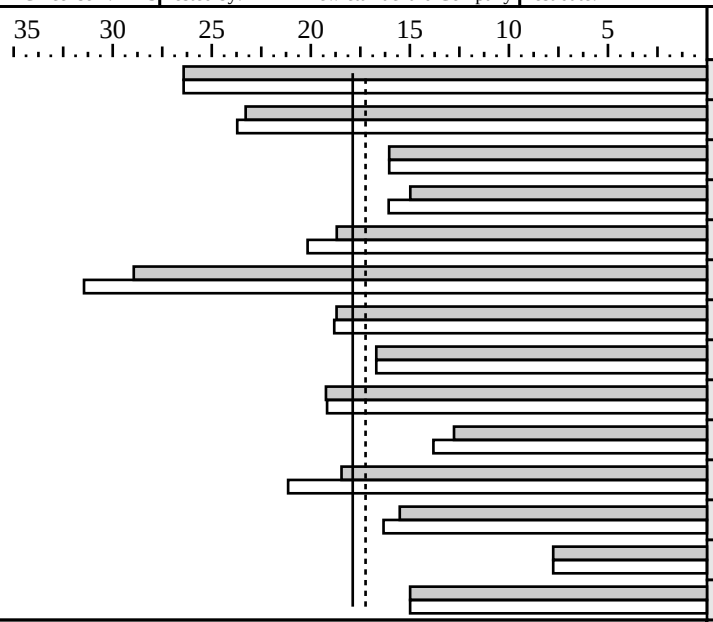
## Hewlett-Packard Company

## ProLiant DL385 (AMD Opteron (TM) 275)

SPECfp_rate2000 = 17.9

SPECfp_rate_base2000 = 17.2

SPEC license #: 3 | Tested by: Hewlett-Packard Company | Test date: Jul-2005 | Hardware Avail: Jul-2005 | Software Avail: Jun-2005




| Benchmark | Base Copies | Base Runtime | Base Ratio | Copies | Runtime | Ratio |
|---|---|---|---|---|---|---|
| 168.wupwise | 1 | 70.3 | 26.4 | 1 | 70.3 | 26.4 |
| 171.swim | 1 | 154 | 23.3 | 1 | 152 | 23.7 |
| 172.mgrid | 1 | 130 | 16.0 | 1 | 130 | 16.0 |
| 173.applu | 1 | 163 | 15.0 | 1 | 152 | 16.1 |
| 177.mesa | 1 | 86.9 | 18.7 | 1 | 80.5 | 20.2 |
| 178.galgel | 1 | 116 | 28.9 | 1 | 107 | 31.4 |
| 179.art | 1 | 161 | 18.7 | 1 | 160 | 18.8 |
| 183.equake | 1 | 90.3 | 16.7 | 1 | 90.3 | 16.7 |
| 187.facerec | 1 | 115 | 19.2 | 1 | 115 | 19.2 |
| 188.ammp | 1 | 200 | 12.8 | 1 | 185 | 13.8 |
| 189.lucas | 1 | 126 | 18.4 | 1 | 110 | 21.1 |
| 191.fma3d | 1 | 157 | 15.5 | 1 | 149 | 16.3 |
| 200.sixtrack | 1 | 164 | 7.76 | 1 | 164 | 7.76 |
| 301.apsi | 1 | 201 | 15.0 | 1 | 201 | 15.0 |

### Hardware

| | |
|---|---|
| CPU: | AMD Opteron (TM) 275 |
| CPU MHz: | 2200 |
| FPU: | Integrated |
| CPU(s) enabled: | 1 core, 1 chip, 2 cores/chip |
| CPU(s) orderable: | 1,2 |
| Parallel: | No |
| Primary Cache: | 64KBI + 64KBD on chip |
| Secondary Cache: | 1024KB(I+D) on chip per core |
| L3 Cache: | N/A |
| Other Cache: | N/A |
| Memory: | 4x2048MB PC3200 CL3.0 |
| Disk Subsystem: | 1x36.4GB 15K Ultra320 SCSI |
| Other Hardware: | |

### Software

| | |
|---|---|
| Operating System: | Windows Server 2003 Enterprise SP1 |
| Compiler: | Intel C++ Compiler 8.0 Build 20040318Z<br>Intel Fortran Compiler for 32-bit applications 8.1 build 20050517Z<br>PGI Fortran compiler 6.0-4 for Windows XP (32-bit)<br>Microsoft Visual Studio .NET 7.0.9466 (for libraries)<br>MicroQuill Smartheap Library 7.0<br>AMD Core Math Library V2.6.0 |
| File System: | NTFS |
| System State: | Default |

## Notes/Tuning Information

```
+FDO: PASS1=-Qprof_gen  PASS2=-Qprof_use
+ACML is linking with AMD Core Math Library V2.6.0
ONESTEP is set for all peak runs.
ifort is the Intel Fortran compiler, icl is the Intel C++ compiler and
pgf90 is the PGI Fortran compiler.
The Intel C++ 8.0 and the Intel Fortran 8.1 compilers are setup in the following order:
   "c:program filesintel ortrancompiler80ia32 inifortvars.bat"
   "c:program filesintelcppcompiler80ia32 iniclvars.bat"
To make sure that the correct libraries are selected, the following link option is
added for the peak runs where Intel Fortran 8.1 compiler is used:
    LDOPT = -Fe$@ -link -LIBPATH:"c:program filesintel ortrancompiler80ia32lib"
(denoted by +LIBPATH:INTEL8.1 in the optimization flags listed below)
Base tuning for C programs:       icl   -fast -arch:SSE2 -QaxW +FDO
Base tuning for FORTRAN programs: pgf90 -fastsse -Mipa=fast,inline
Portability flags:
  178.galgel: -Mfixed
Peak tuning:
```

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## Notes/Tuning Information (Continued)

```
  168.wupwise:       pgf90 basepeak=yes
  171.swim:          ifort -Qipo  -O3  -QaxN -QxW +FDO -Qunroll0     +LIBPATH:INTEL8.1
  172.mgrid:         pgf90 basepeak=yes
  173.applu:         ifort -Qipo  -O3  -QaxN -QxW +FDO -auto         +LIBPATH:INTEL8.1
  177.mesa:          icl   -Qipo -arch:SSE2       +FDO -Qunroll1 -Qansi_alias
                         -Qoption,f,-ip_ninl_max_stats=1500,-ip_ninl_max_total_stats=4500
  178.galgel:        pgf90 -fastsse -Mipa=fast,safe RM_SOURCES=lapak.f90 -Munix +ACML
  179.art:           icl   -Qipo             -Zp4 +FDO
  183.equake:        icl   basepeak=yes
  187.facerec:       ifort -Qipo             -QxW +FDO -Qunroll3     +LIBPATH:INTEL8.1
                         -Qoption,f,-ip_ninl_max_stats=2500,-ip_ninl_max_total_stats=7000
  188.ammp:          icl   -Oa   -arch:SSE2  -Zp4      -Qansi_alias
  189.lucas:         ifort -Qipo             -QxW      -Qunroll1     +LIBPATH:INTEL8.1
  191.fma3d:         ifort -Qipo       -QaxN -QxW +FDO -Qansi-alias- +LIBPATH:INTEL8.1
  200.sixtrack:      pgf90 basepeak=yes
  301.apsi:          pgf90 basepeak=yes
Other Configuration Notes
  /NUMPROC=1 flag was added to boot.ini to invoke uniprocessor environment.
BIOS Configuration Notes
  Node Interleaving is Disabled
```